

ABSTRACT

A conventional method for a solid-state laser device that obtains a laser beam output of a high quality at a high output using a laser diode as a pumping light source has a problem that the costs are increased and the fabrication becomes complicated due to an increasing number of components, such as a diffusing reflection mirror, a condenser lens, and a holding mechanism and a cooling mechanism thereof. Coating with a antireflection coating to reduce a transmission loss of laser diode light, and coating with a high reflection coating to reflect the laser diode light are provided alternately on the outer surface of a cooling tube. Also, an irradiation direction of the laser diode is not directed to the center of the laser rod, but is given with a certain angle to be positively tilted. This configuration makes it possible to eliminate the above problem.